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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,643	08/28/2001	Atsushi Murakami	249-194	4473

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EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 02/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/939,643

Applicant(s)

MURAKAMI ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

1. Applicants have a right to request rejoinder of claim 9 with the rest of the claims once allowable claims have been indicated.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 10 rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takahashi et al (US 6,013,362). Takahashi teaches a soundproof material comprising a polyurethane foam impregnated with an acrylate resin (example 2). Since Takahashi is using the same materials and the same impregnating process to form a shape memory foam material as Applicants, it is the examiner's position that the pores of the polyurethane foam must be inherently filled with the acrylate resin which has a

melting point lower than the polyurethane foam. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete (Note discussion found in Ex parte Slob, 157 USPQ 172). The soundproof material of Takahashi meets the structure recited and made of the materials set out in the claims, the soundproof material would inherently perform the same memory function as the shape memory foam of the present invention. Note In re Best 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made under 35 USC 102.

With regard to claim 4, Takahashi discloses the porous member can be made of a polyurethane foam or rubber foam (column 2, lines 26-30).

With regard to claim 6, since Takahashi is using the same materials such as polyurethane foam to form a shape memory foam material as Applicants, it is the examiner's position that the density and the water absorption coefficient of the foam would be inherently present.

5. Claims 1-8 and 10 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Buese (US 3,728,206).

Buese teaches a thermoplastic supportive structure comprising a polyurethane foam and a thermoplastic material impregnated and distributed in the cells of the foam (column 3, line 75 et seq.). The thermoplastic materials including polyisoprene and polychloroprene have a softening temperature of about 120°F (48°C) (column 5, lines 70-73, column 6, line 13). It seems from the claim, if one

meets the structure recited, the properties must be met or Applicant's claim is incomplete (Note discussion found in Ex parte Slob, 157 USPQ 172). The thermoplastic supportive structure of Buese meets the structure recited and made of the materials set out in the claims, the soundproof material would inherently perform the same memory function as the shape memory foam of the present invention.

Note In re Best 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made under 35 USC 102.

With regard to claim 6, Buese discloses the polyurethane foam having a density of 1 to 6 pounds per cubic foot (column 4, line 51). Likewise, it is apparent that the foam has a density less than 100 kg/m³. Since Buese is using the same materials such as polyurethane foam to form a shape memory foam material as Applicants, it is the examiner's position that the water absorption coefficient of the foam would be inherently present.

6. Claims 1-8 and 10 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bogdany (US 5,114,773). Bogdany teaches a carpet underlay cushion structure comprising a polyurethane foam impregnated with a fluid composition that includes acrylic polymer or styrene copolymer (column 5, lines 60-68). Since Bogdany is using the same materials and the same impregnating process to form a shape memory foam material as Applicants, it is the examiner's position that the pores of the

Art Unit: 1771

polyurethane foam must be inherently filled with the acrylic or styrene polymer which inherently has a melting point lower than 120°C (column 5, lines 65-68). It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete (Note discussion found in Ex parte Slob, 157 USPQ 172). The carpet padding of Bogany meets the structure recited and made of the materials set out in the claims, the carpet padding would inherently perform the same memory function as the shape memory foam of the present invention.

Note In re Best 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made under 35 USC 102.

With regard to claim 6, Bogdany discloses the polyurethane foam having a density of 1.5 pounds per cubic foot (column 5, line 48). Likewise, it is apparent that the foam has a density less than 100 kg/m³. Since Bogdany is using the same materials such as polyurethane foam to form a shape memory foam material as Applicants, it is the examiner's position that the water absorption coefficient of the foam would be inherently present.

Response to Arguments

7. Applicant's arguments with respect to claims 1-8 and 10 have been considered but are moot in view of the new ground(s) of rejection.
8. The art rejections in Paper no. 4 have been overcome by the present amendment and response.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned

are (703) 872-9310 for regular communications and (703) 872-9311 for After
Final communications.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is
(703) 308-0661.

HV
February 9, 2003



TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700